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[Continued on next page]

(54) Title: COMPOSITIONS AND METHODS FOR THE THERAPY AND DIAGNOSIS OF ACNE VULGARIS

N-terminal and Mass-Spec Sequencing of the
P. acnes proteins Z I&II Proteins

GROVDPLVCNDASCLQLRAVPDERNPQ^{START}KKVFLAAPLIIVGALM

APAAFSGATAHAAPVAPIVAVSATQPNKTL^{ZI}SVAAQKELOVVNA
N-ter peptide: ZI MS: ZI

RIASLLDTOKSAKEAFAPANVLNIGKLLTARRIKEALVNVKIG
N-ter peptide: ZII

GIAFLKSIPTRY^{ZII}ELLVTMYDTYNGAAHTLQDKAOPAHSHVFLEL
MS: ZI & ZII

VHASVLLTVTSATSDQLKDEMAAVKKALAEAKM^{ZI & ZII}PDLPNDVA
MS: ZI & ZII

TPYTXTKLSRVLRQIRFORNTCVLPFKRLGTIYFMSRALLKATC

VLMELVYRVSEYDQAITDYKAAQDALKAPNRLTTPAVPSVCLP
MS: ZI & ZII

APAAS

(57) Abstract: Compositions and methods for the therapy and diagnosis of acne vulgaris and other related conditions are disclosed. Compositions may comprise one or more *Propionibacterium acnes* proteins, immunogenic portions thereof, or polynucleotides that encode such portions. Alternatively, a therapeutic composition may comprise an antibody that binds a *Propionibacterium acnes* protein, antigen presenting cell that expresses a *Propionibacterium acnes* protein, or a T cell that is specific for cells expressing such a protein. Such compositions may be used, for example, for the prevention and/or treatment of acne.

WO 01/81581 A2